

Name: \_\_\_\_\_

### p1028b: Combine Like Terms (v7)

#### Example

Combine like terms.

$$x - 3x^2 - 8 + 6x^2 + 9x - 4 - 2x^2 + 3x - 7 + 2x$$

#### Answer

Combine the quadratic terms.

$$-3x^2 + 6x^2 - 2x^2 \equiv 1x^2$$

Combine the linear terms.

$$x + 9x + 3x + 2x \equiv 15x$$

Combine the constant terms.

$$-8 - 4 - 7 \equiv -19$$

The final result:

$$x^2 + 15x - 19$$

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#### Question 1

Combine like terms.

$$6x - 4 + 7x^2 + 8x^2 + 2x - 5 - 6 + 5x^2 + 9x - 3$$

$$20x^2 + 17x - 18$$

### **Question 2**

Combine like terms.

$$-7x + 4x - 5x - 2 - x^2 + 7 - 4x^2 + 6x^2 + 5 - 8x^2$$

$$\color{red}{-7x^2 - 8x + 10}$$

### **Question 3**

Combine like terms.

$$-5x^2 - 4x - 7x + 9x^2 - 1 - 3 - 2x - 8x^2 + 2 + 3$$

$$\color{red}{-4x^2 - 13x + 1}$$

### **Question 4**

Combine like terms.

$$2x + 4 + 3x^2 - 3x + 7x^2 + 6x^2 - 8x - 9 + 9 + x$$

$$\color{red}{16x^2 - 8x + 4}$$